

port Academy of Sciences be placed on the List of Correspondents to receive the Proceedings from the year 1870 onwards.

And the meeting was adjourned.

Stated Meeting, September 21st, 1877.

Present, 12 members.

Vice-President, Mr. FRALEY, in the Chair.

Visitor, Mr. A. E. Carpenter, of Philadelphia.

Letters accepting membership were received from Mr. John Ericsson, dated New York, July 1; from Mr. H. C. Humphrey, dated Seabrook, Conn., August 10; from Prof. J. J. Sylvester, dated St. John's College, Cambria, August 11; from Prof. James Geikie, Perth, Scotland, August 14, 1877.

A photograph for the Album was received from Mr. James Geikie.

Letters of acknowledgment were received from Prof. Steenstrup, Copenhagen, August 31 (99); Royal Zoological Society, Amsterdam, July 14 (96, 98); M. Henri de Saussure, Geneva, August 15 (96, 98); Bureau des Longitudes, Paris, July 18 (96, 98); Royal Society, Edinburgh, August 8 (96, 98); Natural History Society, Northumberland, &c., August 22 (96, 98).

Letters of envoy were received from the Royal Society of New South Wales, July 11, 1877; S. de Geographie Commerciale de Bordeaux, June 1; Meteor. Office, London, July, 1877; Mr. H. S. Eddy, Cincinnati, Ohio, August 28.

A letter was received from Mr. Ludwig Mejer, Secretary of the Natural History Society of Hanover, informing the Society, that Nos. 96 and 98, sent to Prof. Stromeyer, had been given on the death of that member of the Society to the Society in Hanover, and requesting that the gift be confirmed, and the transmission of Proceedings be continued on the basis of exchanges.

On motion the title of the Nat. His. Society of Hanover was ordered to be placed on the list of Corresponding Societies to receive the Proceedings.

Donations for the Library were received from the Department of Mines, Victoria, N. S. W.; Imp. R. Academies at Berlin, Rome and Brussels; the Society at Augsburg; Geographical Society and Annales des Mines, and R. Politique at Paris; Society of Antiquaries; Nature and Cobden Club, London; Boston S. N. H.; Silliman and Dana; College of Physicians, Penn Monthly, Franklin Institute, Amer. Jour. of Pharmacy, Medical News, and E. D. Cope, of Philadelphia; Mr. John Ericsson of New York; Prof. H. D. Eddy of Cincinnati; and the Mexican Meteorological Observatory.

The death of Prof. Louis Stromeyer, at Hanover, in August, 1876, was announced by the Secretary.

The death of Mr. Robert Were Fox, at Falmouth, England, July 25, in the 88th year of his age, was announced by the Secretary.

Prof. Sadtler communicated verbally his personal observations of collections of so-called Paraffine from around the pipes and bore holes of the Oil region, and his laboratory demonstration that it was a mechanical emulsion of gas and water condensed upon the surfaces from which it is collected.

Prof. Sadtler promised soon to give the finished results of his investigations in the Laboratory of the University into the nature of the natural gases emitted by the oil wells. He has already discovered that the higher hydro-carbons of the marsh gas series are really present in these gases almost universally.

A description of the Spouting Wilcox Well, No. 1., in McKean county, by W. Charles A. Ashburner, of the Geological Survey of Pennsylvania, with a graphical representation of the time, order, and height of a series of jets from it, was read by the Secretary.

Mr. Briggs explained why and how this phenomenon of

paroxysmal ejection from a bore hole can only occur in case the upper section of the hole has a larger diameter than the lower.

The first of the series of colored geological county maps of Pennsylvania, in preparation by Mr. Julius Bien of New York, to illustrate the reports of progress of the Assistant Geologists of Pennsylvania, viz: a map of Fayette county, was exhibited by the Secretary, who said that its chief value consisted in its careful differentiation of the Coal Measures into four series, its exhibition of all the isolated patches left by erosion, and, in general terms, the completeness of its outcrop lines, carefully traced as they had been by its author, Prof. J. J. Stevenson, on foot, throughout the district. A copy of the old geological State map of 1842 (published in 1858) was exhibited to show the contrast, and the progress of our knowledge of local geology of the State, as well as to illustrate the different way in which the second survey of the State can be carried on, owing to more fortunate circumstances.

Prof. Chase placed upon the blackboard some of his results in a search (by request of Professor Draper of New York) for some harmonic series of lines in the solar spectrum. He gave the coincidences which appear in the case of the Gold lines, the Barium lines, and especially of Fraunhofer's dark lines, and concluded with an earnest protest against the assumption that such coincidences can be merely accidental.

Pending nomination No. 839 was read.

The following report was read by Mr. Price, as Chairman of the Committee on the Michaux Legacy :

"At a meeting of the Committee on the Michaux Legacy, of the Amer. Phil. Society, held September 8, 1877, present F. Fraley, Eli K. Price, Wm. M. Tilghman, and J. B. Townsend, it was

"Resolved, That out of the reserved interest of the Legacy, trees from Fairmount Park be planted in the grounds of the University of Pennsylvania, not to exceed in cost one hundred dollars (\$100).

"Resolved, That it is recommended to the Park Commissioners to supply the trees for the above purpose, as far as suitable, from importations made by the Society's appropriations to the Park Commission out of the Income of the Michaux Legacy."

On motion the report was accepted and an appropriation of one hundred dollars (\$100) was made to meet the expenses indicated therein.

On motion of Dr. Rushenberger it was

Resolved, That the Curators be requested to inquire into the expediency of depositing the collection of implements illustrative of the Stone Age, bequeathed to the A. P. Society by the late Mr. Franklin Peale, in care of the Academy of Natural Sciences of Philadelphia.

And the meeting was adjourned.

Stated Meeting, October 5th, 1877.

Present, 12 members.

Vice-President, Mr. FRALEY, in the Chair.

Letters of acknowledgment were received from the Teyler Museum at Harlem (96, 98, 99); and the Glasgow Phil. Society (99).

Letters of envoy were received from the Depart. of Interior, Washington, September 27; and the Museum at Mexico, August 18, 1877.

Donations for the Library were received from the Society at Ulm; the Academy at Brussels: the *Révue Politique*; British Association; Geological Society, Meteorological Society, and London Nature; from the Essex Institute; Boston S. N. H.; Silliman and Dana; Cornell University; Franklin Institute; College of Pharmacy; Dep. Interior and Signal Service Office; and the Museum and Observatory in Mexico.

The death of M. U. J. J. LeVerrier, at Paris, September 23, 1877, aged 66 years, was announced.

A communication entitled: "Level Notes and Compass Courses of the Seaboard Pipe Line, from the mouth of Black Fox run, Clarion county, Pa., to Patapsco river, near Baltimore, Md. Lines run by O. Barrett, Jr., C. E. Western Division; B. F. Warren, C. E. Middle Division; J. B.